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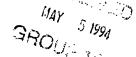
Serial No. 07/967,646 Filed: October 28, 1992

Page 2 (Amendment Under 37 C.F.R. §1.115 - April 22, 1994)



27. (Amended) A composition which comprises a transparent <u>non-porous</u> or translucent non-porous system further comprising a double-stranded oligonucleotide or polynucleotide which is directly or indirectly fixed or immobilized to a solid support wherein one of the strands comprises a chemical label that further comprises a signalling moiety which [will generate] is capable of generating a soluble signal.

46. (Amended) An apparatus comprising:



- 1) a solution containing means comprising a transparent <u>non-porous</u> or translucent non-porous device; and
- 2) means for forming a fixed or immobilized double-stranded oligonucleotide or polynucleotide hybrid to a solid support, said hybrid comprising a chemical label attached to one strand of said hybrid, said label further comprising a signalling moiety which will generate a soluble signal; and
- 3) a soluble signal generating means.
- 47. (Amended) A kit for generating a soluble signal from a chemically labeled double-stranded oligonucleotide or polynucleotide, comprising in one or more containers:
  - (i) a first single-stranded oligonucleotide or polynucleotide strand [or] containing a sequence having attached thereto a chemical label that further comprises a signalling moiety which [will generate] is capable of generating a soluble signal, said sequence being partially homologous or hybridizable to a sequence contained in a nucleic acid of interest, and said [sequence] strand being directly or indirectly fixed or immobilized to a solid support;
  - (ii) a second single-stranded oligonucleotide or polynucleotide containing a sequence which is homologous to a different sequence contained in said sample nucleic acid than said first sequence in (i);
  - (iii) a solution for generating a soluble signal; and
  - (iv) buffers and instructions therefor.

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